

REMARKS

This is in response to the Office Action mailed in the referenced application on November 24, 2003. In the Office Action, claims 1, 2 and 4 are rejected under 35 U.S.C. § 102(e) as being anticipated by Chauvel, *et al.* (U.S. Patent No. 6,369,855). In view of the following remarks, the applicants respectfully request reconsideration of the rejections.

The applicants' invention is directed to a moving picture experts group (MPEG) decoder for producing captions for display on a screen. An MPEG video data stream includes a header portion which includes user data. The user data is used to define caption data used in displaying a caption on the display along with the video image. The applicants' system includes a video decoder which decodes the video stream and extracts the user data. The user data is forwarded to a central processing unit (CPU) which converts the user data to on-screen-display (OSD) object data. An OSD controller in the applicants' system receives the OSD object data and converts it into pixel data and outputs the pixel data to a mixer. The mixer mixes the converted pixel data, which represents a caption in OSD object data format, with the decoded video stream. A video encoder encodes the mixed signal to produce the final video output signal.

Hence, in accordance with the claimed invention, caption data can be presented on a display screen in OSD format. This eliminates the need for a special dedicated caption encoder. That is, captions can be displayed on displays such as televisions in standard OSD format, without the need for a caption encoder.

In contrast, the Chauvel, *et al.* system is of the type clearly distinguished by the applicants' claims. Specifically, the Chauvel, *et al.* system includes a dedicated caption encoder which processes caption data separately from OSD data. The Examiner is referred to column 56 lines 38-50, wherein the closed caption encoder employed by Chauvel, *et al.* is disclosed. The Chauvel, *et al.* system does process OSD data as well as caption data. However, the caption data is not converted or transformed into OSD data as set forth in the applicants' claims.

Referring to Figures 1B and 2 of Chauvel, *et al.*, the Chauvel, *et al.* system includes a video decoder 252, a NTSC/PAL encoder 260 and an OSD controller 270. The video decoder 252 receives the video data stream and decodes it. The video decoder 252 extracts the caption

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and extended data services (EDS) information from the video bit stream and sends it to the NTSC/PAL encoder module 260 (see Chauvel, *et al.* at column 11 lines 27-31). The OSD module manages OSD data from different OSD windows and blends them with the video. The OSD module 270 reads OSD data and mixes it with video output. The OSD processing can be turned on and off by a CPU 220 (see Chauvel, *et al.* at column 38 lines 29-46). The NTSC/PAL encoder module 260 receives both the OSD data from the OSD module 270 and the caption data from the video decoder 252 and provides them at Y, C, and composite video outputs (see Chauvel, *et al.* at column 56 lines 30-49).

Hence, in Chauvel, *et al.*, video data, OSD data and caption data are all processed. However, in contrast to the applicants' claimed invention, in Chauvel, *et al.* the caption data is not converted or transformed into OSD data. Instead, in Chauvel, *et al.*, video data is processed by the OSD controller 270, and caption data is processed separately by the NTSC/PAL encoder 260. As clearly disclosed by Chauvel, *et al.*, caption data is not transferred to the OSD controller and, therefore, it is not converted or transformed into OSD object data, as set forth in the applicants' claims.

The Examiner refers to Chauvel, *et al.* as teaching transforming caption data into OSD object data. However, as discussed above, the applicants disagree with that interpretation of Chauvel, *et al.* As clearly set forth in the Chauvel, *et al.* patent and illustrated in the Chauvel, *et al.* figures, no caption data is transformed into OSD object data in Chauvel, *et al.* As clearly disclosed by the reference, caption data and OSD data are processed separately and then recombined to form the video output.

The operation of the OSD controller in Chauvel, *et al.* is described at length in the Chauvel, *et al.* patent. The applicants have studied the entire reference and find no teaching, suggestion or even contemplation of converting caption data into OSD object data as claimed by the applicants. As examples of this, the Examiner is referred to Figure 18D and the corresponding description thereof at column 42 lines 35-65. Figure 18D illustrates typical OSD pictures. There is no disclosure whatsoever of these pictures including caption data. Figure 18F illustrates a block diagram of the Chauvel, *et al.* OSD controller. The figure is described in the patent at column 43 line 33 through column 44 line 17. There is no description or suggestion of the OSD controller transforming caption data into OSD object data. Furthermore, since Chauvel,

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et al. explicitly disclose a closed caption encoder, there is no need in Chauvel, *et al.* to transform caption data into OSD data, as set forth in the amended claims.

The Chauvel, *et al.* patent is an example of the prior art clearly distinguished by the applicants' patent application and claims. Specifically, Chauvel, *et al.* discloses a system with a dedicated closed caption encoder for processing caption data, which is of the type of system mentioned in the applicants' Background of the Invention as being improved upon by their invention. The applicants' invention, on the other hand, is directed to a system which can provide a caption capability without the need for a special caption encoder, by transforming caption data into OSD data and then presenting the caption data as OSD data. These aspects of the invention are clearly set forth in the claims, and they are clearly not taught or suggested by Chauvel, *et al.*

In view of the foregoing remarks, it is clear that Chauvel, *et al.* fail to teach or suggest the invention set forth in the applicants' claims. Specifically, Chauvel, *et al.* fail to teach or suggest transforming caption data into OSD object data for presentation on a display. Accordingly, it is believed that the claims are allowable over Chauvel, *et al.*, and reconsideration of the rejections of the claims under 35 U.S.C. § 102(e) based on Chauvel, *et al.* is respectfully requested.

In view of the foregoing remarks, it is believed that all claims pending in the application are in condition for allowance and such allowance is respectfully solicited. If a telephone conference will expedite prosecution of the application, the Examiner is invited to telephone the undersigned.

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Respectfully submitted,

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Technology Center 2600

Steven M. Mills

Registration Number 36,610

Attorney for Applicants

Date: 2/18/04
Mills & Onello, LLP
Eleven Beacon Street, Suite 605
Boston, MA 02108
Telephone: (617) 994-4900
Facsimile: (617) 742-7774
J:\SAM\0098\RCEamendmenta.wpd